

GAYENKO, L., insh.

New diesel fuel for winter. Avt. transp. 37 no. 12:13-15 D '59.
(Diesel fuels) (MIRA 13:3)

GAYENKO, L., inzh.

Regulating the water temperature during the running-in of the
IAAZ-204 engine. Avt. transp. 38 no. 9:32-33 S '60.
(MIRA 13:9)
(Diesel engines -- Cooling)

GAYENKO, L., inzh.

Regulating oil temperature during the running-in of the
IAAZ-204 engine. Avt.transp. 39 no.10:25-27 0 '61.
(MIRA 14:10)
(Diesel engines—Lubrication)

GAYENKO, Lazar' Mikhaylovich; SEDOVA, A.P., red.; NIKOLAYEVA, L.N., tekhn.
red.

[Running-in and testing repaired motor-vehicle engines] Prirabotka
i ispytanie avtomobil'nykh dvigatelei posle remonta. Moskva, Avto-
transizdat, 1961. 37 p.
(Motor vehicles--Engines) (MIRA 14:6)

GAYENKO, N.

Protection of plants in Holland. Zashch. rast. ot vred. i bol.
(MIRA 19:1)
10 no.3:46-47 '65.

1. Sovetnik Posol'stva SSSR v Gollandii.

GAYENKO, N.P.

Summer planting of seed potatoes in the Netherlands.
Agrobiologija no.6:927-931 N-D '65.

(MIRA 18:12)

ARKHANGORODSKIY, L.A.; BUKSHTEYN, Ya.A.; VOROB'YEV, S.V.; GAYENKO, P.A.; DOLGOV, Ye.N.; ZHIGLIN, A.A.; ZUBOVSKIY, G.P.; ISHKOV, I.G.; KRYZHANOVSKAYA, G.L.; LISTRATOV, A.A.; LUR'YE, R.I.; MOROZOV, N.P.; OSTROZETSER, A.S.; PAVLOV, N.A.; PETROV, L.M.; POPOV, V.N.; TARTAKOVSKIY, M.A.; TAUBE, D.N.; KHANIN, L.T.; SHAPIRO, TS.S.; SHVAYTSBURG, B.A.; SHEVTSOV, V.D.; DENISENKOVA, L.M., red.

[Assembler's handbook on performing mechanical assembly and special work on grain elevators and grain processing enterprises] Spravochnik montazhnika; po proizvodstvu mekhanomontazhnykh i spetsial'nykh rabot na elevatorakh i predpriyatiyah po pererabotke zerna. Moskva, TSentr. in-t nauchno-tekhn. informatsii i tekhniko-ekon. issl., 1963. 519 p. (MIRA 17:7)

GAYENKO, V.D.

Conveyer for feeding parts. Mashinostroitel' no.11:13 N '61.
(MIRA 14:11)
(Conveying machinery)

GAYER, Ferencne

Characteristics of Tungsram P13, P13A, P13B, P14 and P15 transistors. Radio-
technika 10 no.3:90-92 Mr. '60.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000514520012-1

GAYER, Ferencne

Semiconductor circuit elements. Radioteknika 10 no.6:185 Je '60

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000514520012-1"

PUZA, Vl.; GAYER, J.; FOREJT, J.

The mechanism of multinuclear muscle cell formations. Cesk.
morf. 13 no. 3:294-299 '65.

1. Biological Institute, Medical Faculty, Charles' University,
Hradec Kralove.

PUZA, Vladimir; FOREJT, Jiri; GAYER, Jan

Some remarks on the origin of multinuclearity in muscle fibers.
Biologia (Bratisl.) 20 no. 1:867-872 '65

1. Ustav obecné biologie Lekarské fakulty Karlovy University v
Hradci Králové.

L 33490-66

ACC NR: AF6023508

SOURCE CODE: CZ/0049/65/000/011/0867/0872

AUTHOR: Puza, Vladimir--Puzha, V. (Docent; Doctor; Candidate of sciences; Hradec Kralove); Forejt, Jiri--Foreyt, I. (Hradec Kralove); Gayer, Jan--Gaier, Ya. (Hradec Kralove) 8
B

ORG: Institute of General Biology, Medical Faculty, Charles University, Hradec Kralove (Ustav obecne biologie Lekarske fakulty KU)

TITLE: Some notes regarding the origin of multinuclearity of muscle tissue 22

SOURCE: Biologia, no. 11, 1965, 867-872

TOPIC TAGS: myology, animal, cytology, histology

ABSTRACT: Formation of multinuclear tissues in live cells of embryonal chicken muscles grown in vitro was studied by means of phase-contrast microscopy. Some muscular tissues merge into each other, some divide into separate formations. Muscle formations containing more than one nucleus should be called sarcoblasts, not myosymplasts, because they are not necessarily formed by a merger of tissues. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 10Apr65 / ORIG REF: 002 / SOV REF: 002

OTH REF: 012

Card 1/1 J2

0915

1068

S/032/63/029/001/001/022
B101/B186

AUTHORS: Zhukhovitskiy, A. A., Turkel'taub, N. M., Gayer, M.,
Lagashkina, M. N., Malyasova, L. A., and Shlepuzhnikova, G. P.

TITLE: Vacantochromatography

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 8 - 13

TEXT: A variant of chromatography is suggested in which the mixture to be separated flows continuously through the column and the carrier gas is added in portions. The rules governing the motion of bands in conventional chromatography apply also to the resulting "vacancies" (places containing no substance to be absorbed). Examples of vacantochromatograms are given for hydrocarbon mixtures where the "vacancies" were produced by addition of 0.6 cm³ air. The asymmetry of peaks is less when using the suggested method than in the usual adsorption chromatography. The area of the "vacancy" peak is proportional to the volume of the carrier gas added. The sensitivity can be increased by moving a temperature field against the flow. Another variant is the addition of carrier gas with a verifying agent, e.g. butane. The impurity concentration can be calcu-
Card 1/2

Vacantochromatography

S/032/63/029/001/001/022
B101/B186

lated from the ratio between the peaks of the gaseous impurities in He and the peak of the butane vacancy. Vacantochromatography is particularly recommended for the analysis of low-boiling impurities. The direct use of a flame ionization detector is possible when analyzing noncombustible substances. There are 7 figures and 2 tables.

ASSOCIATION: Institut yadernoy geofiziki i geokhimii (Institute of Nuclear Geophysics and Geochemistry)

Card 2/2

GAYER, P.

Q-3

HUNGARY/Farm Animals. Rabbits.

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101229

Author : Gayer, P. Eva; Bartha, Tibor

Inst : -

Title : Studying Stilbestrol Effects on Rabbits.

Orig Pub: Allattenyesztés, 1957, 6, No. 2, 177-183

Abstract: Effects of hormonal castration upon histologic testes structure, as well as stilbestrol effects upon fattening and fur quality of animals were studied in experiments on 25 male rabbits of various ages. When 20-40 mg of syntestrin tablets were given subcutaneously, total castration effects were assured; 4.6 mg mixed with food caused diminution of libido. Animals treated in such a manner displayed greater weight increases

Card 1/2

64

GAYER-DUSZYNsKA, Irena

Selectivity during the process of fertilization of *Drosophila melanogaster*. *Fol. biol., Warsz.* 2 no.3-4:147-168 1954.

1. Zaklad Biologii Akademii Wychowania Fizycznego. Kierownik:
prof. dr. St. Bilewicz.

(FLIES,

Drosophila melanogaster, selectivity in fertilization)

(FERTILIZATION,

of Drosophila melanogaster, selectivity)

GRAYER-DUSZYN SKA, I.

GRAYER-DUSZYN SKA, J.; JANOTA-BASSALIK, L.

Effect of radiations microorganisms. Postepy biochem. 3 no.3-4:289-
307 1957.

(MICROORGANISMS, effect of radiations,

review (Pol))

(RADIATIONS, effects,

on microorganisms, review (Pol))

Gray et al - DUSZYNSKA, I.; PRZELECKA, A.

Report from a conference on cell biology studies.
Kosmos biol 12 no.6:535-537 '63.

Gray et al -

ZHURAKHOVSKIY, P., inzh.; GEL'FER, S., inzh.; GAYETSKIY, A., inzh.

Machine for cutting adhesive rubber. Avt.transp. 40 no.10:31
0 '62. (MIRA 15:11)
(Cutting machines)

ZHURAKHOVSKIY, P.N.; GEL'FER, S.; GAYETSKIY, A.

Glue spraying unit. Avt.transp. 4 no.8:52-53 Ag '62. (MIRA 16:4)
(Gluing—Equipment and supplies)

ZHURAKHOVSKIY, P.; GEL'FER, S.; GAYETSKIY, A.

Machine for inserting vulcanization devices. Avt.transp. 40
no.4:53 Ap '62. (MIRA 15:4)
(Vulcanization--Equipment and supplies)

ZHURAKHOVSKIY, P.N.; GEL'FER, S.M.; GAYETSKIY, A.G.

Mechanization of labor consuming operations in tire repair shops.
Kauch.i rez. '21 no.3:45-47 Mr '62. (MIRA 15:4)

1. Kiyevskiy shinoremontnyy zavod.
(Tires, Rubber--Repairing)

ZHURAKHOVSKIY, R.; GAYETSKIY, A.; GEL'FER, S.

Tire-retreading line. Avt.transp. 41 no.4:35-36 Ap '63.
(MIRA 16:5)
(Tires, Rubber--Retreading and recapping)

1. GAYEV, A.K.
2. USSR (600)
4. Limestone - Gornaya Shoriya
7. Report of the magnesite-prospecting party on its activities for 1941. (Abstract)
Izv.Glav.upr.geol.fon. no.3 1947
9. Monthly List of Russian Accessions. Library of Congress. March 1953. Unclassified.

GAYEV, A.M.

New method for upsetting screw heads. Stan. i instr. 28 no.4:
36-37 Ap '57. (MLRA 10:5)
(Bolts and nuts)
(Dies (Metalworking))

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000514520012-1

ANDREYEV, V.T., kand.tekhn.nauka; KONDRAT'YEV, V.I., inzh.; DUDIN, N.K., inzh.;
GAYEV, A.Ye., inzh.

Underground installation of a flue. From street. 2 no. 74-26 '65.
(MORA 1818)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000514520012-1"

ACC NR: AP6015708

(A)

SOURCE CODE: UR/0413/66/000/009/0110/0111

INVENTOR: Gayev, D. V.; Golubev, G. M.; Levin, M. I.; Malykhin, A. A.; Margulis, Yu. I.; Spiridonov, G. M.

ORG: None

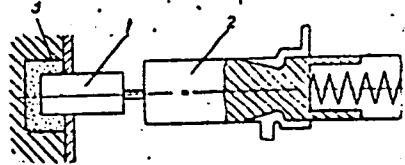
TITLE: A temperature control for an internal combustion engine. Class 42, No. 181406 [announced by the Central Scientific Research Diesel Institute (Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut) and the Chelyabinsk Tractor Plant (Chelyabinskij traktornyy zavod)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 110-111

TOPIC TAGS: temperature control, internal combustion engine component

ABSTRACT: This Author's Certificate introduces a temperature control for an air-cooled internal combustion engine. The control contains a contact type pickup. The thermal contact between the engine and the pickup is improved by setting the pickup in the engine cavity which is filled with an intermediate heat transfer agent such as an easily fusible inert salt.

SUB CODE: 21/ SUBM DATE: 09Feb65

1--pickup; 2--control;
3--engine cavity

UDC: 621.43-712-533.65

Card 1/1

L 111149-66 EWT(m)/T DJ

ACC NR: AP6002949

(A)

SOURCE CODE: UR/0286/65/000/024/0110/0110

INVENTOR: Gayev, D. V.; Golubev, G. M.; Levin, M. I.; Malykhin, A. A.; Margulis, Yu. I.; Spiridonov, G. M.

37

13

ORG: none

TITLE: A temperature regulator for an internal combustion engine. Class 42, No. 177186 [announced by Central Scientific Research Diesel Institute (Tsentral'nyy nauchno-issledovatel'skiy dizeл'nyy institut); and the Chelyabinsk Tractor Plant (Chelyabinsk traktornyy zavod)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 110

TOPIC TAGS: internal combustion engine, air cooled engine, temperature regulator

ABSTRACT: This Author's Certificate introduces a temperature regulator for an air-cooled internal combustion engine. The unit contains a pickup with a sensing element which operates a spring slide valve to regulate the oil flow to the hydraulic clutch of the blower. The reliability of the device is improved by mounting the pickup on an engine component, e.g. on a cylinder head, and by making the sensing

Card 1/3

UDC: 621.43-543.2-533.65

L 14449-66

ACC NR: AP6002949

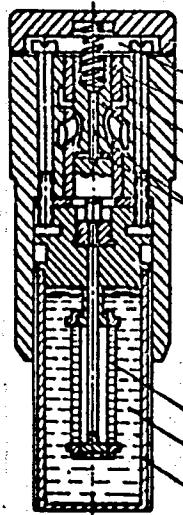
element in the form of a bellows with a long stroke. Additional balancing for the slide valve is provided by connecting the space above the valve to the supply line.

SUB CODE: 21/ SUBM DATE: 25Dec64

Card 2/3

L 14449-66

ACC NR: AP6002949



1 - sensing element; 2 - pickup; 3 - slide valve; 4 - spring; 5 - fluid; 6 - transfer section; 7 - channels; 8 - space above the slide valve.

3VK

Card 3/3

GAYEV, G., inzhener.

Increasing operational possibilities of hydraulic dredges. Mor. i rech. flot
13 no. 3:26-28 Jy '53.
(MLRA 6:8)
(Dredging machinery)

GAYEV, G.M.

Lymphocytic struma. Khirurgia, no.11:11-55 N '55. (MLRA 9:6)

1. Iz khirurgicheskogo otdeleniya (zav.-G.M. Gayev) Smolenskogo
oblastnogo onkologicheskogo dispansera.
(GOITER

lymphocytic, pathol. & clin. aspects)

GAYEV, G.M.

GAYEV, G.M.

Gastric hemangio-endothelioma. Sov.med. 21 Supplement:15-16 '57.
(MIRA 11:2)

1. Iz Smolenskogo oblastnogo onkologicheskogo dispensera.
(STOMACH)

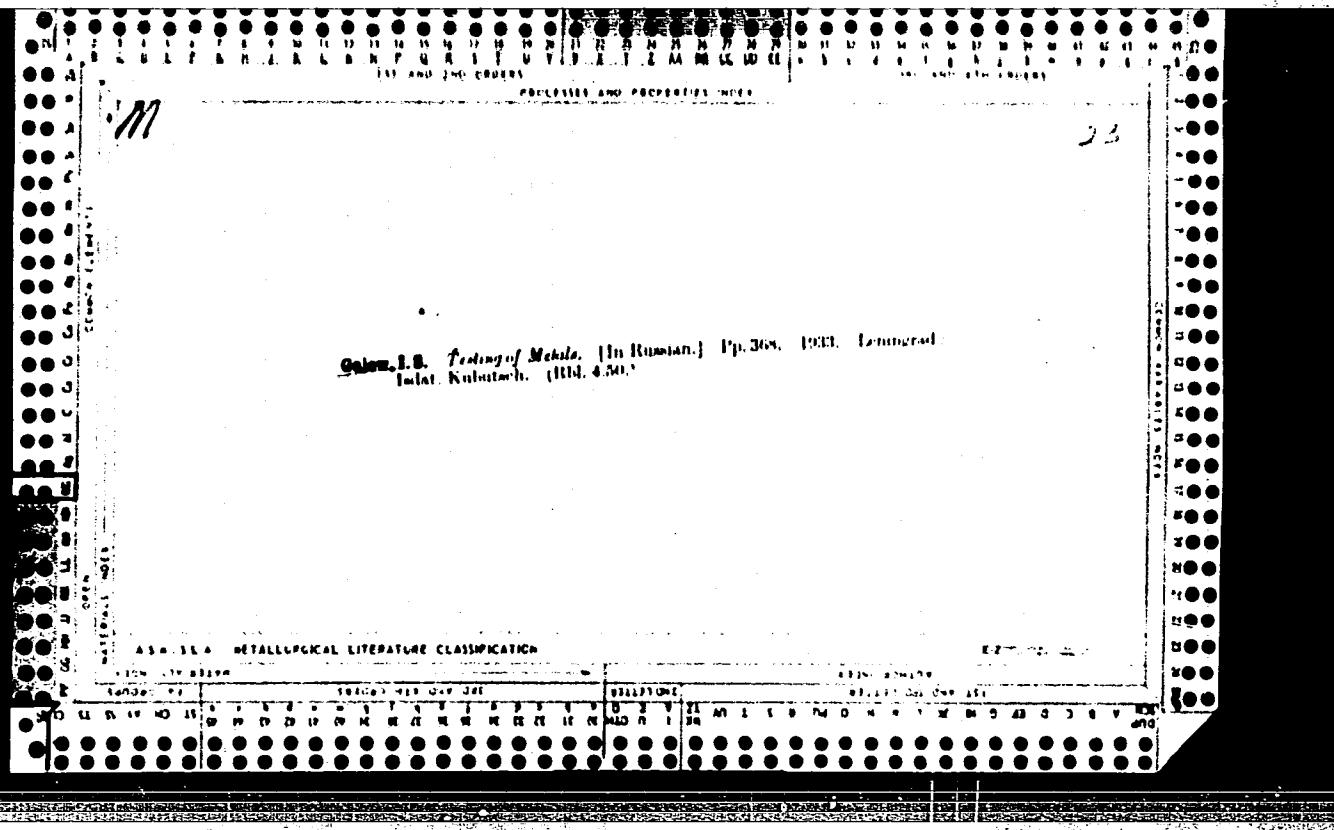
GAYEX, I. S.

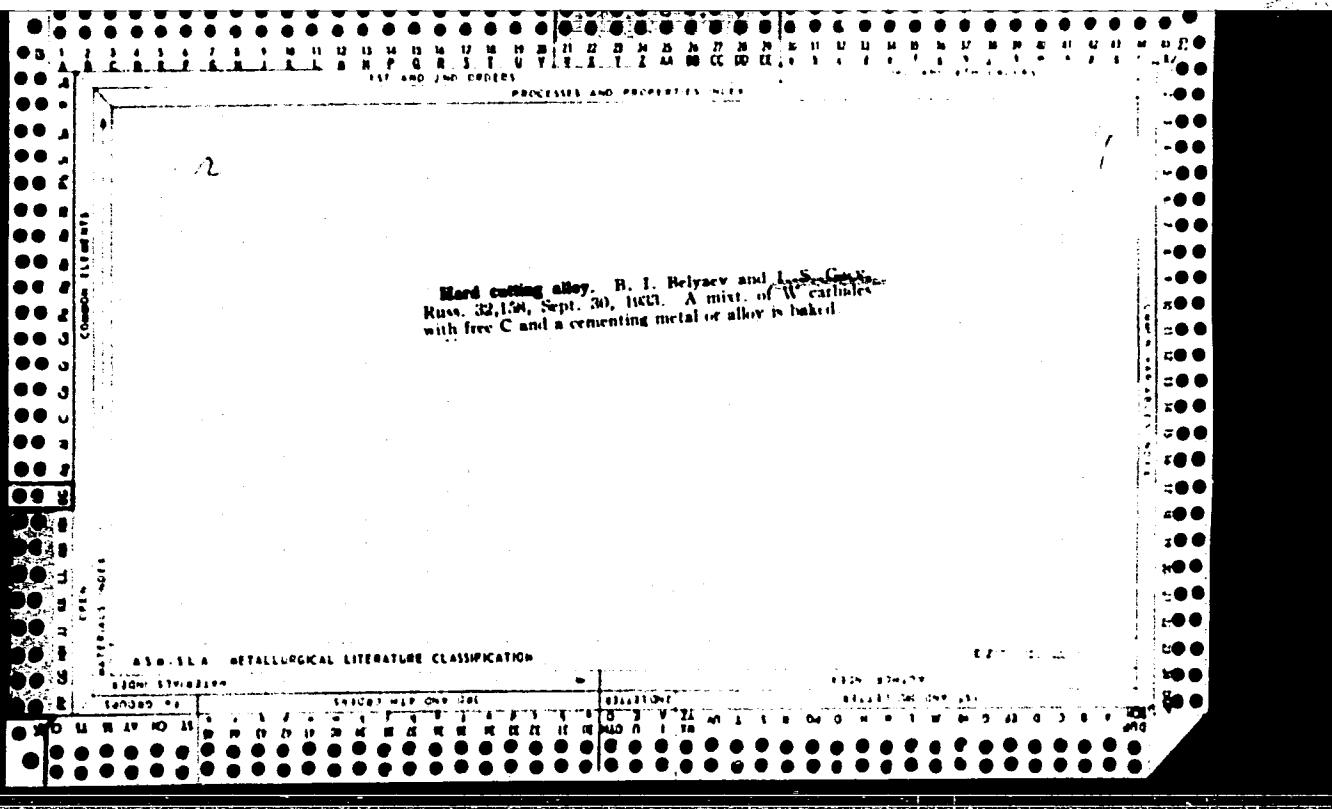
C

Methods for the recognition of the structure of special steels. I. S. Gacy. Metallurg (U. S. S. R.) 6, 549-64 (1931); Chem. Zentral. 1932, I, 2630. -- The mechanism of the action of reagents used in etching alloys which consist of 2 electrochemically different phases includes 2 phenomena: (1) electrolytic soln. of surface particles, combined with the action of microgalvanic elements which consist of the different phases and the ionizing liquid (electrolyte), and (2) oxidation of certain particles on the surface with the development of a definite color. In etching with acid reagents carbide forms the cathode and α -Fe the anode (ferrite). These are reversed with alk. reagents. On various samples of steel the progressive development of the etching, consisting in the corrosion of the anode surface, can be followed. Reagents used for the recognition of carbide and other special structural conditions are usually alk. solns. Addn. of nitrophenol, $K_2Fe(CN)_6$, H_2O_2 , Na_2O_2 , etc., increases corrosion because of oxidizing action. This property of the carbide of becoming the anode in alk. soln. and being covered by

the corrosion is not peculiar to it alone, but also under the same conditions to electrochemically less noble components, wolframite, solid solns. of Fe and Cr, Fe and Mn, etc. Therefore the analysis as carbide solely on such tests is open to question. M. G. M.

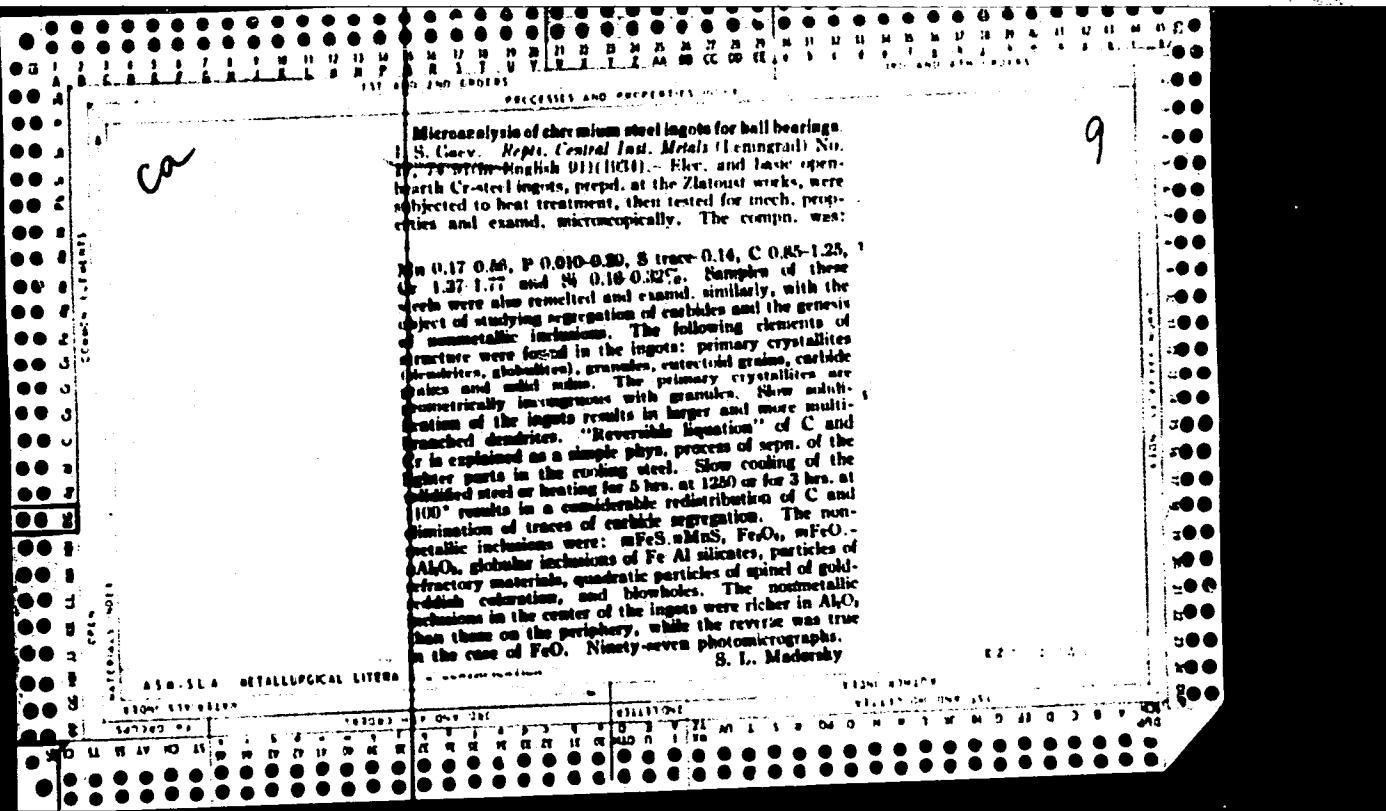
AMERICAN METALLURGICAL LITERATURE CLASSIFICATION





Diffusion of titanium and dissociation of titanium compounds. I. S. Gauz. *Metallurg* 9, No. 10, 19-33 (1934).—Ti begins to diffuse into the Fe lattice at 1300°. Ti forms a eutectic with Fe, m. 1340°. Ti carbides do not dissolve in the Fe solid soln. up to 1300°. Ti nitrides do not dissolve in molten steel at 1300°. H. W. R.

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Allloys of the system Fe-C-Ti. J. S. Gaez, *Rept. Central Inst. Metals Lowangrad No. 10, 1938* (1935). The alloy contained 0.04-2.70% C and 0.1-4.47% Ti. Ti is a very active carbide-forming element. The carbides are stable, take no part in the transformation processes under heat treatment and prevent the enlargement of crystals of the solid solutions. In steels having no $\alpha \rightarrow \gamma$ changes, TiC in hypereutectoid steel prevents the formation of cementite needles during overheating. Ti is very active in closing the γ field. B. Z. Kamich

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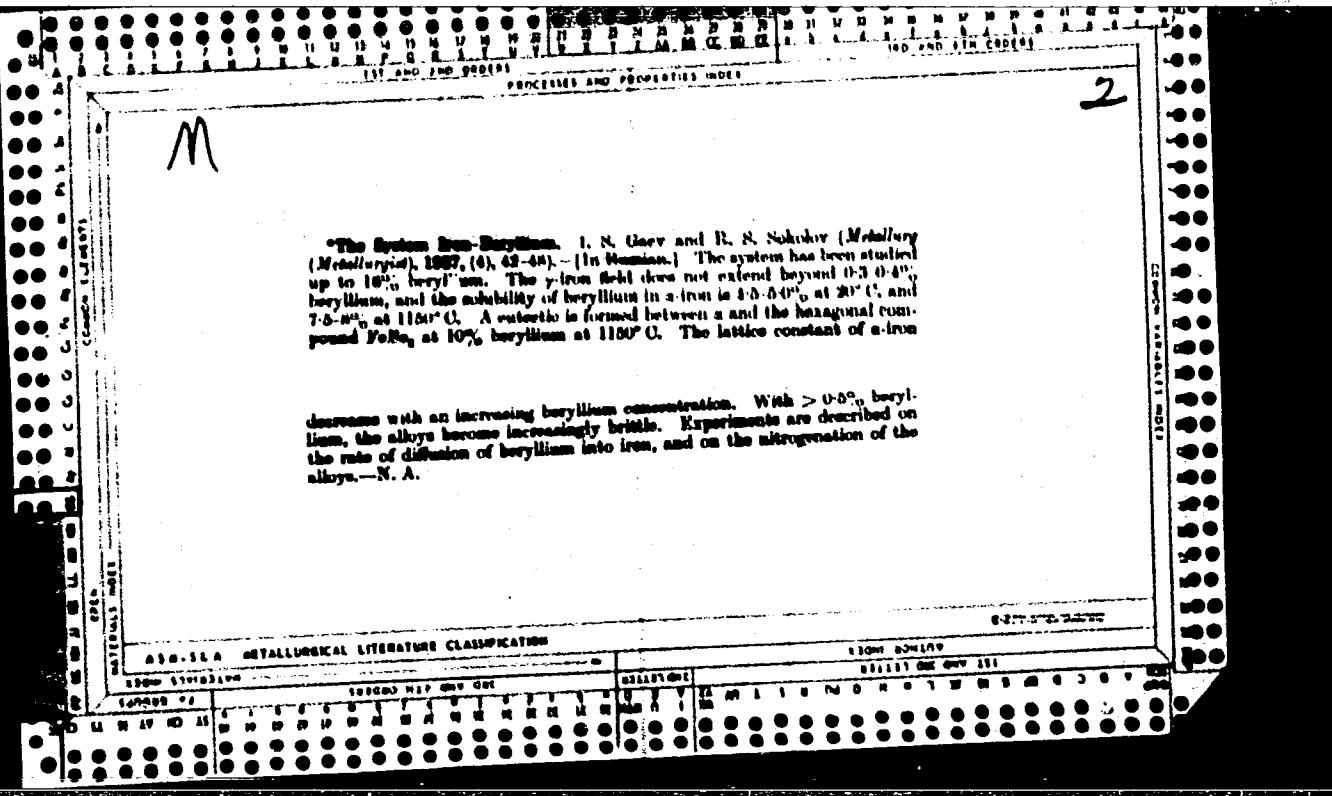
***Alloys of the System Iron-Carbon-Titanium.** I. N. Gurev (N. D. Zhermanskii Zentral'nyi Institut Metallofizika, Leningrad). *Comm. Central'noi Metallofiz. Leningrad*, 1933, (18), 66-93; *C. A.*, 1936, **30**, 8128. [In Russian.] The alloys contained carbon 0.8-2.70 and titanium 0.1-4.47%. Titanium is a very active carbide-forming element. The carbides are stable, take no part in the transformation process under heat-treatment and prevent the enlargement of crystals of the solid solution in steels having no α - γ changes.

Ti²⁺ in hyper-eutectoid steel prevents the formation of cementite needles during overheating. Titanium is very active in closing the γ field. S. G.

11.1.1.1. METALLURGICAL LITERATURE CLASSIFICATION

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CIA-RDP86-00513R000514520012-1"

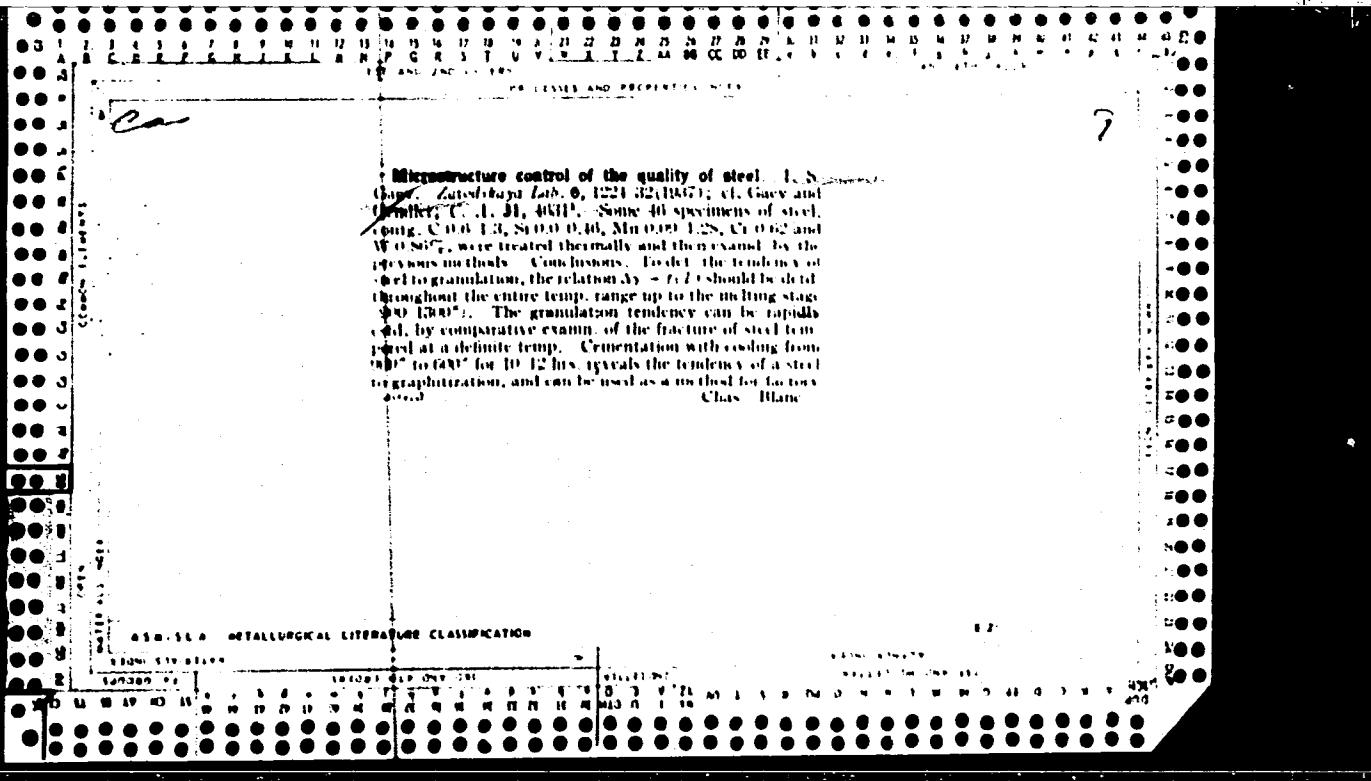


****Alloys of the System Iron-Carbon-Beryllium.*** J. S. Gaez and R. S. Sokolov (*Metallurgy (Metallurgia)*, 1957, (6), 11-20). [In Russian.] Alloys were prepared from steel, 99% iron, ferric-beryllium, and beryllium, by melting in an electric induction furnace; they contained up to beryllium 10, carbon 1.8, silicon 0.07-0.20, and manganese 0.07-0.60%. The constitution of the iron corner of the iron-carbon-beryllium system was constructed from dilatometric measurements and microscopic analyses. The phases existing at room temperature are: a solid solution, Fe_3C , Fe₃B, and Fe_2C (with dissolved Be). If the beryllium content > 0.6%, the compound Be_2C is formed. The presence of beryllium raises the Ar_1 and Ar_3 points and so leads to the closing of the γ -phase field in the diagram. The Ar_1 and Ar_3 points are not changed; the pearlite eutectoid point is displaced to the right under the influence of beryllium. The increase in hardness of steel by the addition of beryllium is less pronounced in the presence of carbon than in its absence. A study was also made of the case hardening of iron-beryllium alloys (for 30 hrs at 930 °C).

110.514 METALLURGICAL LITERATURE CLASSIFICATION

CIA-RDP86-00513R000514520012-1"

A spatial diagram of the relation existing between the granule size and the temperature and carbon contents in steel alloys. I. S. Guly and B. S. Gandler. Zavodskoe Lab. 6, 71 (1952). Various specimens of alloy steel, having 0.2-2.8% C, were heated at different temps (1000-1200°) for 3 hrs, and then gradually cooled and microscopically examined. On the basis of the exptl. results, a spatial diagram was constructed, showing a definite relation between the increasing granulation, temp and C. B.



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ALLOYS OF THE IRON-BERYLLIUM SYSTEM. I. S. Gaev and R. S. Sokolov. (*Metalurgist, Russia*, 1937, vol. 12, No. 4, Apr., pp. 42-48). (in Russian). The authors discuss the results of an investigation of the iron-beryllium system with beryllium concentrations from 0 to 16%. The diagram exhibits a γ -loop extending to 0.3-0.4% of beryllium only. The solubility of beryllium in α -iron is 4.85-8% at 20° , increasing to 7.6-8% at 1150° C.; the eutectic contains 10% of beryllium and freezes at 1150° C. The lattice constant of α -iron is decreased by beryllium. The compound $FeBe_3$ has a hexagonal lattice. Iron alloys containing more than 0.5% of beryllium are brittle. In general the alloys may be nitrogen-hardened and acquire a high surface hardness and resistance to atmospheric corrosion. The velocity of diffusion of beryllium into iron can be represented by an exponential function which is critically discussed.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000514520012-1"

The effect of elements on the properties of steel as related to Mendeleov's periodic law. L. S. Gaev. *Metallurg* 13, No. 4, 314-44 (1938). The effect of enrichment depends on the heat of formation of its O, N or C compds. The stable compds., being in a highly dispersed state increase the rate of decompr. of the solid soln. on quenching and decrease the grain size. Elements whose O, N or C compds. dissociate easily enter the Bc lattice and increase the hardenability of steel. H. W. Rathmann

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SERIALS

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GRUY, IS

PROCESSES AND PROPERTIES INDEX

7

Method and Extent of Melting Control of Steel Heats and the Evaluation of the Properties of Steel from the Point of View of Its Intended Application. I. S. Galey. (Metallurg, 1958, No. 6, pp. 11-20). (In Russian). A scheme of tests to be applied for the purpose of completely characterising a heat is outlined and details of the individual tests are given. The objects of the control scheme are to establish the properties of the given heat of steel and its suitability for particular products, and also the detection of factors liable to lead to defects during any of the stages of mechanical working to which the steel is subjected. The scheme of control includes tests to determine all the characteristics of the furnace charge, the melting process, the deoxidation, tapping, teeming and solidification of the ingots, as well as observations on the workability and the properties of test ingots.

AIA-11A METALLURGICAL LITERATURE CLASSIFICATION

GAEV, IVAN SERGEVICH

Metallograficheskii atlas zheleznykh splavov. Leningrad, Metallurgizdat, 1941.
268 p. diagrs. and atlas of 161 l. of illus.

Metallographic atlas of ferroalloys.

DLC: TN693.17G3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of
Congress, 1953.

GAYEV, I. S.

U S S R

A Toledo blade. I. S. Gayev. *Invest. Akad. Nauk S.S.R., Odd. Tekh. Nauk* 1954, No. 12, 97-101.—A blade presented to Tsar Alexander II of Russia in Toledo in 1849 contained about 1% C, 0.98% Mn, 0.021% S; Si, P, and other impurities were present in amounts no greater than in modern technically pure iron. No sulfides were present, and the steel retained its luster. The hardness was $H_V = 510$ kg./sq. mm.

W. M. Sternberg

GAYEV, I. S.

Influence of Aluminum on the Structure, Size of Austenite Grain and Toughness of Medium-Carbon Steel. I. S. Gayev and V. V. Polovnikov. (Llitvinoz Proizvodstvo, 1955, 11, 18-21). [In Russian]. In the investigation described the importance of structure in the change of the properties of steel brought about by Al was studied. Specimens of untreated steel and of steel to which 0.02%, 0.06%, 0.1%, and 0.2% Al had been added were carburized, decarburized, annealed, or vacuum-heated under various conditions and the resulting grain sizes and mechanical properties studied. The austenite grain size affected mechanical properties only when the effect of non-metallic inclusion was excluded. It is concluded that the net effect of various factors on toughness can be estimated by calculation from quantitative characteristics.—s, x.

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①

of

Distr: 4F1/4E2c

~~Physicochemical basis of the theory of the effect of alloying elements on the structure and some properties of steel~~

~~I. S. Gurev, Trudy Nauch. Tekh. Obshchinstva Chernot. Met.~~

~~6, 132-51(1955); Referat. Zhur., Met., 1956, Abstr. No. 7904.—The following are proposed as basic principles: (1) The change of Ac_1 points by alloying elements in mild steel is related to the effect of these elements on the Ac_1 point in binary systems. (2) The position of Ac_1 is independent of the effect of the alloying element on the position of Ac_1 . (3) The effect of each element on the position of Ac_1 is independent of the amount and number of alloying elements in the steel. (4) The change of phase compn. by elements that form stable carbides is governed by stoichiometric relations. (5) Increase of the concn. of alloying elements decreases hardness of steel after quenching and causes loss of hardenability. (6) The effect of alloying elements on the size of austenite grain is related to their effect upon the position of Ac_1 . (7) In their effect on cementation, all elements are carbide-absorbing or carbide-repelling. (8) The diffusive permeability of the material depends on the thermodynamic state, the physicochem. properties of the solid soln., and the intergranular layers. (9) Coeff. of diffusion of C in steel can change within wide limits on the addn. of alloying elements; it is related to the depth of C penetration, which does not depend on the kind of added element.~~

~~A. N. Pestov~~

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2

11/8/84

GAYEV, I.S.

Method of Measuring the Austenite Grain. I. S. Gayev
and V. V. Polovnikov. (Zavodskaya Laboratoriya, 1955,
21, (8), 665-687). (In Russian). Austenite grain-size determina-
tion for characterizing the stability of a given heat of
steel to grain-growth is considered. A brief critical review
is given of standard methods in general and as applied to
several steels, and results obtained by four methods for a
steel with 0.38% C and 0.0% Mn are compared. *31*

GAYEV, I. S.

✓ Influence of various elements on the grain size of austenite of medium carbon steel. I. S. Geov and V. V. Poloznikov (Zh. Tekhn. Fiz., 1955, 25, 528-533).—The effects of Mn, Cr, Ni, Al, V, Mo, Si, Cu and Co on austenite grain size were investigated. It was shown that elements lowering the Ac_1 point increase the grain size of austenite at a standard temp. of its appearance and vice versa. No similar relationship with the Ac_1 point was found.

I. IRON STEEL INST. (R.J.C.)

2

GAYEV, I.S.

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 362

Author: Gayev, I.S.

Institution: None

Title: On the Correlation of the Physicochemical Properties of Carbides

Original Periodical: Zh. neorgan. khimii, 1956, Vol 1, No 2, 193-211

Abstract: The solution processes of carbides and the redistribution of the elements between the various phases during the heating of steel are discussed together with the separation of the carbides from solution during the annealing and tempering of the steel with a view toward correlating certain of the physicochemical properties of the carbides themselves and of the carbide-forming elements. It is shown that for the formation of double carbides the free-energy change (kcal/gram-atom) at 1,000° K for the corresponding monocarbide must be less than 10. This condition is met by Cr, Mo, W, and Mn. For $\Delta F_1,000K > 10$,

Card 1/2

GAYEV, I. S.

✓ 848* (Russian) Damascus Steel and Modern Iron-Carbon
Alloys. Bulaj i sovremenennye tseliuglerodistye splavy.
I. S. Gayev. Metallovedenie i Obrabotka Metallov. 1956, no. 9.
Sept. 1956, p. 17-24.
Mechanical properties of Damascus steel; the possibility of
reproducing some of them in modern mass-produced Fe-C
alloys.

df

GAYEV, P.T., insh.

New method for boring drainage holes. Mont.i spets.rab.v
stroi. 22 no.8:25-28 (MIRA 13:8)

1. Treat Soyuzshakhtosusheniye.
(Kursk Magnetic Anomaly--Mine drainage)
(Boring machinery)

G.MEV, P.T., inzh.

New electrical pros for the under-ground detection of mineral deposits.
Shakhit. Attri. 5 no. 20-11-1971. (M. M. A.)

1. Treat magnetic minerals.
(magnetic metal, water, under-ground)
(coring, drilling)

GAYEV, P.T., inzh.; ZELINSKIY, V.M.; MIKHAYLYUK, N.T.; RUKMAN, G.L.; SOLOKHA, A.P.

Remote control of immersible pumps during mine drainage. Shakht stroi. 8 no.3 6-8 Mr '64. (MIRA 17:3)

1. Vsesoyuznyy trest po osushcheniyu obvodnennykh ugol'nykh mestorozhdeniy Glavtsentroshakhtstroya Ministerstva stroitel'stva predpriyatiy ugol'noy promyshlennosti SSSR (for Gayev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Zelinskiy). 3. Institut Avtomatugle-rudprom konosopskogo elektromekhanicheskogo zavoda "Krasnyy metal-list" (for Mikhaylyuk, Rukman, Solokha).

LIUJO

GAYEV, V.

1000/Individual 100 Lines 4602.0300

Jul 1947

"Capital Reconstruction of Second Tracks," V. Gayev,
R. Ampilogov, 8 pp

"Zh-d Transport" No 7.

Report on progress in establishing two-way traffic
on important lines in the USSR. References to spe-
cific lines and distances.

11G46

GAYEV, Vasiliy Grigor'yevich, zhurnalist; KISELEV, Vasiliy
Kharitonovich, inzh.; BELOV, M.P., red.

[Prospects for developing the chemical industry in the
Khabarovsk Economic Region] Perspektivy razvitiia khi-
micheskoi promyshlennosti v Khabarovskom ekonomiceskem
raione. Khabarovsk, Khabarovskoe knizhnoe izd-vo,
1964. 28 p. (MIRA 17:10)

1. Nachal'nik gornorudnoy i khimicheskoy promyshlennosti
Khabarovskogo sovnarkhoza (for Kiselev).

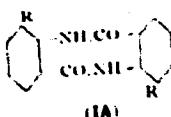
NOVOZHILOV, M.G., prof.; KUCHERYAVYY, F.I., kand.tekhn.nauk;
DRUKOVANYI, M.F., gornyy inzh.; GAYEK, Yu.V., gornyy inzy.

Introduce new highly efficient technology in open-pit mining
of hard ores. Gor. zhur. no.10:20-21 O '61. (MIRA 15:2)

1. Dnepropetrovskiy gornyy institut.
(Strip mining)

CA GAYERA, L.H.

Preparation of aromatic amino carboxylic acids from aryl isocyanates. N. S. Dokunikhin, L. A. Guseva, and I. D. Kraft. *Doklady Akad. Nauk S.S.R.* 101, 1071-1073 (1955).—PhNO (12 g.) treated at 133-40° with 97 g. AlCl_3 and 21 g. NaCl and the salt, stirred 0.5 hr. and treated with ice yields 49.2% of a compd. (1) (1A, $R = \text{H}$), m. 278.8-9.8° (from



11A

AcO)₂. Similarly, α -MeC₆H₄NCO gave a compd. (II) (IA, R = Me), m. 225-7°. I with hot 10% NaOH in 10 hr. gave α -H₂N₂C₆H₄CO₂H. 1-C₆H₅NCO gave 3-amino-1-naphthalic acid, which readily cyclizes to naphthosuccinyl, m. 180-4-1.°, on heating with HCl. COCl₂ with 3-aminoacaphthene at 160-7° gives Succinylmethyl iminato but does not form 3,6-diaminoacaphthalene carboxylic acid probably because of steric conditions. The ring closures of the isocyanates probably are not analogous to the Leuckart reaction and possibly occur via formation of polymeric (dimeric) forms of the isocyanates, which then rearrange to the above-cited polycycles. This is supported by formation of the same product from Ph iminato dimer (m. 175-2-0°; from PhNCO in pyridine) and AlCl₃, as is formed from PhNCO but, mixing the reagents did not cause a temp. rise in the case of the dimer. G. M. Kosolapoff

from PhNCO itself, but noting the very high temp. rise in the case of the dimer. G. M. Kosolapoff
**Synthesis of amino malonites. V. Synthesis of bis-
 nitrophenylsuccinic allyl- and aryl- compounds and prod-
 ucts of their reduction.** J. K. Feldman and T. I. Gurevich.

GAY EVA, L.M.

Organic Isocyanate series. I. Transformation of isocyanates of the benzene series under the influence of aluminum chloride. N. S. Dokunikhin and L. A. Gaeva (K. E. Voroshilov Org. Intermed. and Dye Inst., Moscow). Zhur. Obshch. Khim. 23, 608-10 (1953); cf. C. A. 48, 4487d. —Aromatic isocyanates and their dimers with a molten mixt. of $\text{AlCl}_3\text{-NaCl}$ yield 3-phenyl-2,4-dioxotetrahydroquinazoline derivs. These decompose on heating into aromatic amines and salts of the corresponding aminobenzoic acids. The reaction is useful for the introduction of CO_2H in α -position to an NH_2 group. PhNCO (12 g.) added at 135-40° to a melt of 97 g. AlCl_3 and 23 g. NaCl , the mixt. stirred 0.5 hr., treated with ice, the product washed with dil. HCl , extd. with hot 2% Na_2CO_3 , and the ext. cooled gave 49.2% 3-phenyl-2,4-dioxotetrahydroquinazoline (I), m. 280-1.4° (from AcOH). A 64.3% yield results from similar treatment of PhNCO dimer, m. 175.2-6.0°, obtained from PhNCO and dry pyridine in 3 days at room temp. I is also formed readily by passing dry HCl into an EtOH soln. of $\alpha\text{-PhNHCONHC}_6\text{H}_4\text{CO}_2\text{H}$. I (4 g.) heated 6 hrs. with 50 ml. 10% NaOH , then extd. with C_6H_6 and acidified with HCl to pH 3.5-4.0, gave 1.78 g. $\alpha\text{-H}_2\text{NC}_6\text{H}_4\text{CO}_2\text{H}$ acid. $\alpha\text{-MeC}_6\text{H}_4\text{NCO}$, b. 184-6°, treated as above with $\text{AlCl}_3\text{-NaCl}$ gave 24% 3-(*o*-tolyl)-8-methyl-2,4-dioxotetrahydroquinazoline (II), m. 225-7° (from AcOH), which yielded 71.4% 3,2- $\text{Me}(\text{H}_2\text{N})\text{C}_6\text{H}_4\text{CO}_2\text{H}$ (III), m. 170.8-2.2° (from H_2O). $\alpha\text{-MeC}_6\text{H}_4\text{NCO}$, b. 187.2-7.4°, treated as above gave 50.8% 3-(*m*-tolyl)-7-methyl isomer of II, m. 290.5-2.5° (from iso-BuOH), which gave 70% 4-Me isomer of III, m. 170-7.2°. $\rho\text{-MeC}_6\text{H}_4\text{NCO}$, b. 187-9°, gave 44% 3-(*p*-tolyl)-6-methyl isomer of II, decomp. 289-90° (from EtOH), also formed in 50% yield on similar treatment of the isocyanate dimer, m. 185-6°; the product gave 44.2% 5-Me isomer of III, m. 173.8-4.8° (from dil. MeOH). COCl_3 and $(\alpha\text{-ClC}_6\text{H}_4\text{NH})\text{CO}$ gave $\alpha\text{-ClC}_6\text{H}_4\text{NCO}$, b. 200-3°, converted to 48.1% 3-(*o*-chlorophenyl)-8-chloro-2,4-dioxotetrahydroquinazoline (IV), m. 223-4° (from EtOH),

which gave 88% 3-chloroanthranilic acid (V), m. 190.0-1.2° (from H_2O); the latter (0.2 g.) treated in refluxing EtOH with N_2O stream, and the soln. dilid. with H_2O , made strongly alk. with NaOH , refluxed to hydrolyze the intermediate ester, concd., and acidified, gave $\alpha\text{-ClC}_6\text{H}_4\text{CO}_2\text{H}$, m. 151-6°. $\alpha\text{-ClC}_6\text{H}_4\text{NCO}$, b. 200-3.5°, gave 46.6% 3-(*m*-chlorophenyl)-7-chloro isomer of IV, m. 309.6-11.0° (from AcOH), which yielded 81% 4-Cl isomer of V, m. 238.5-9.5° (from dil. EtOH). $\beta\text{-ClC}_6\text{H}_4\text{NCO}$, b. 203-4°, gave 48.4% 3-(*p*-chlorophenyl)-6-chloro isomer of IV, m. 323.5-5.0° (from AcOH), formed in 62% yield by similar treatment of RNCO dimer, does not m. 170°, obtained from the monomer in pyridine for unstated period. The quinazoline gave 78% 5-Cl isomer of V, m. 210-10.5° (from H_2O). $2,5\text{-Cl}_2\text{C}_6\text{H}_3\text{NCO}$, b. 233-3.5°, m. 27.4-8.8° (from CCl_4), gave 41.2% 3-(*1,5*-dichlorophenyl)-5,8-dichloro-2,4-dioxotetrahydroquinazoline, m. 281.8-3.0° (from iso-BuOH); the isocyanate (6 g.) fused with $\text{AlCl}_3\text{-NaCl}$ at 155-60°, the product treated with ice, the ppt. washed with 10% NaOH , boiled 6 hrs., the mixt. filtered, and the filtrate acidified gave 48.6% 3,6-dichloroanthranilic acid, m. 162.8-4.0° (from H_2O). $2,4\text{-Me}_2\text{C}_6\text{H}_3\text{NCO}$, b. 211.2-12.0°, gave 22.8% 3-(*2,4*-dimethylphenyl)-6,8-dimethyl-3,4-dioxotetrahydroquinazoline, m. 253-4.5° (from iso-BuOH); the usual treatment of the RNCO gave 12.3% 2-amino-3,5-dimethylbenzoic acid, m. 189.6-90.8°. COCl_3 and $\rho\text{-H}_2\text{NC}_6\text{H}_4\text{P}_h$ gave $\beta\text{-PhC}_6\text{H}_4\text{NCO}$, m. 55.5°, which heated with $\text{AlCl}_3\text{-NaCl}$ at 135-40° and treated as above, gave 85.5% 4,2- $\text{Ph}(\text{H}_2\text{N})\text{C}_6\text{H}_4\text{CO}_2\text{H}$, m. 202.8-3.8° (from dil. EtOH).

G. M. Kosolapoff

GAYEVA, L.A.

USSR/Chemistry - Aromatics

Card 1/1 Pub. 151 - 32/36

Authors : Dokunikhin, N. S.; Gaeva, L. A.; and Pletneva, I. D.

Title : Organic isocyanates. Part 3.- Reaction of aromatic isocyanates with halides

Periodical : Zhur. ob. khim. 24/1, 174-178, Jan 1954

Abstract : Data are presented regarding the reaction between aromatic organic isocyanates with halides. The chlorination of phenyl- and 1-naphthylisocyanates was investigated and the results are described. It was established, in contradiction to the Gumpert and Curtius data, that arylisocyanates do not form addition products with Cl and Br. The characteristics of phenylisocyanate, obtained during the heating of 1- and 2-naphthylisocyanates with N,N'-diphenylurea and acetanilide, are described. Eleven references: 2-USSR; 5-USA and 4-German (1875-1953).

Institution : The K. E. Voroshilov Scientific Research Institute of Organic Semiproducts and Dyes

Submitted : July 23, 1953

GAYEVA, L. A.

USER/Chemistry - Conversion processes

Card 1/1 Pub. 151 - 33/37

Authors : Dokunikhin, N. S., and Gayeva, L. A.

Title : Investigation of organic isocyanates. Part 4.- Conversion of phenyl- and 1-naphthylisothiocyanates in the presence of aluminum chloride

Periodical : Zhur. ob. khim. 24/10, 1871-1873, Oct 1954

Abstract : The derivation of 3-phenyl-2,4-dithion-tetrahydroquinazoline and 2-mercaptopbenzthiazole through the reaction of phenylisothiocyanate with aluminum chloride and the derivation of thionaphthostyryl from the reaction of 1-naphthylisothiocyanate with $AlCl_3$, are described. The process of converting thionaphthostyryl into naphthostyryl is explained. Seven references: 4-German; 2-USSR and 1-USA (1876-1954).

Institution : The K. E. Voroshilov Scientific Research Institute of Organic Semi-Products and Dyes.

Submitted : May 5, 1954

6/15/74, L.A.
DOKUNIKHIN, N.S.; GAYNEVA, L.A.

Dyes from benz[cd]indole. Khim. Znaka i prom. 3 no.1:126-127 '58.
(NIR 11:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley im. K. Ye. Veroshilova.
(Benzindole) (Dyes and dyeing)

DOKUMIKHIN, N.S.; GAYEVA, L.A.

4,10-Dibenzoylanthrone and products of its cyclization. Khim.
(MIRA 11:6)
nauka i prom. 3 no.2:280 '58.

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley im. K.Ye. Voroshilova.
(Dibenzopyrene) (Cyclization)

AUTHORS: Dokunikhin, N. S., Gayeva, L. A. SOV/79-28-10-9/60

TITLE: Derivatives of Benz-(c,d)-Indoline (Proizvodnyye benz-(c,d)-indolina) I. Thionaphtho Styrene and N-Methyl Thionaphtho Styrene (Thionoafostiril i N-metilthionoafostiril)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2670 - 2672 (USSR)

ABSTRACT: The chemistry of benz-(c,d)-indole is little investigated (Ref 1). It was mentioned only in connection with the structure of the Lyserg acid - a decomposition product of the indole alkaloids. The non-substituted benz-(c,d)-indole is unknown as its synthesis could not be carried out until now (Ref 2). The benz-(c,d)-indoline was obtained in 1950 by the action of LiAlH_4 on naphtho styrene (I) (Ref 3) in ethyl morpholine. Of interest to the investigator was the naphtho styrene as lactame of the 1,8-amino naphthoic acid which is an intermediate product in the synthesis of vat dyes of the anthranthrone series (Ref 4). The thio analog of naphtho styrene, 2-thiobenz-(c,d)-indoline (II)

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Derivatives of Benz-(c,d)-Indoline. I. Thionaphtho
Styrene and N-Methyl Thionaphtho Styrene

SOV/79-28-10-9/60

was obtained by the action of $AlCl_3$ on 1-naphthyl-isothiocyanate (Ref 5). It was of interest to find another synthesis of this compound and its N-alkyl substitution products, as the latter can not be synthesized by isomerization of the isothiocyanates. Compound (II) could be obtained from (I) by heating with P_2S_5 in xylene (Scheme 1). The marked acid

properties of the thionaphtho styrene pointed to the isomeric structure (IIa), which fact contradicted, however, the infrared spectrum taken of the crystals that pointed to NH. The substitution of oxygen by sulphur was also possible for the compound (III). Contrary to the synthesis mentioned in a French patent the authors succeeded in carrying out this synthesis by direct methylation of the naphtho styrene with dimethyl sulfate in alkali liquor and with the methyl ester of benzene sulfo acid (Scheme 2). There are 1 table and 6 references, 4 of which are Soviet.

Card 2/3

Derivatives of Benz-(c,d)-Indoline. I. Thionaphtho
Styrene and N-Methyl Thionaphtho Styrene

SOV/79-28-10-9/60

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh polupro-
duktov i krasiteley imeni K.Ye.Voroshilova, Moskva
(Scientific Research Institute for Organic Semi-Products
and Dyes imeni K. Ye. Voroshilov, Moscow)

SUBMITTED: September 2, 1957

Card 3/3

AUTHORS: Dokunikhin, N. S., Gayeva, L. A. SOV/79-28-11-9/55

TITLES: Derivatives of Benz-(C,D)-Indoline (Proizvodnyye
benz-(C,D)-indolina)
I. 6-Benzoylbenz-(C,D)-Indoline-2-on, -1-Methyl-6-Benzoylbenz-(C,D)-Indoline-2-on, and Their Cyclization Products (II. 6-Benzoylbenz-(C,D)-indolin-2-on, 1-methyl-6-benzoylbenz-(C,D)-indolin-2-on i produkty ikh tsiklizatsii)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 2944-2948
(USSR)

ABSTRACT: The N-acyl derivatives of aromatic amines yield amino substituted ketones on the action of aluminium chloride according to Friedel-Crafts (Refs 1-3). A similar reaction could unexpectedly not be realized with N-benzoyl naphthostyryl. As the acylation of naphthostyryl in the aromatic nucleus according to Friedel and Crafts (Fridel', Crafts) was unknown the authors synthesized by the reaction of benzoyl chloride and $AlCl_3$ with the latter the 6-benzoylbenz-(C,D)-indoline-2-on (I). Its structure was proved by its transformation into compound (VII). On a heating of (I) in alkali liquor the compound (II) is formed. The diazo compound (III)

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Derivatives of Benz-(C,D)-Indoline .

SOV/79-28-11-9/55

II. 5-Benzoylbenz-(C,D)-Indoline-2-on, 1-Methyl-6-Benzoylbenz-(C,D)-Indoline-2-on, and Their Cyclization Products

obtained from it led to (IV). The alkali solution of the 8-oxy-5-benzoyl-1-naphthoic acid with dimethyl sulfate yielded the compound (V) and by saponification of this ester the free acid (VI). The decarboxylation of this acid met with difficulties as a chlorination takes place parallel to the closure of the cycle. Compound (VIII) reminds by its structure of the vat dye dibenzpyrene quinone (IX), it could, however, not be vatated by reduction with sodium hydrosulfite. This can be explained by the formation of the salt of the isomer (X) on the action of alkali, as this salt has only one $\text{C}=\text{O}$ group. There are 8 references, 4 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni K. Ye. Voroshilova (NIOPiK) g. Moskva (Scientific Research Institute of Organic Semiproducts and Dyes imeni K. Ye. Voroshilov (NIOPiK) Moscow)

Card 2/3

25(5)

AUTHORS:

Gayevaya, L. A., Nayman, I. M.

SOV/64-59-4-22/27

TITLE:

Eye- and Face Protection in the Production of Calcium Carbide, Corundum, and When Working With Aggressive Substances
(Zashchita glaz i litsa v proizvodstve karbida kal'tsiya, korunda i pri rabote s agressivnymi veshchestvami)

PERIODICAL:

Khimicheskaya promyshlennost', 1959, Nr 4, pp 79-80 (USSR)

ABSTRACT:

In the Chernorechenskiy khimicheskiy zavod imeni M. I. Kalinina (Chernorechenskiy Chemical Works imeni M. I. Kalinin), and Yerevanskiy karbidniy zavod (Yerevan Carbide Works) the heat radiation of carbide furnaces at the moment of pouring-out the end product exceeds considerably the standard. It is therefore absolutely necessary to introduce a corresponding working protection. Some new, respectively modified protection devices (for face and eyes) for the workers of the carbide and corundum production, and in the production of red phosphorus are described. First a face-protection (Fig 1) consisting of a steel grid screen and a radiative protection is described. The latter one consists of protective glass of the type SO-32, with either blue cobalt glass of the type P-500, or a glass with a

Card 1/2

Eye- and Face Protection in the Production of SOV/64-59-4-22/27
Calcium Carbide, Corundum, and When Working With Aggressive Substances

reflecting aluminum layer. For the protection against the high temperature occurring in the corundum production, a face protection made of transparent safety glass (methylmethacrylate) (Fig 2) is recommended, which is in an aluminum frame to prevent deformation. As skull guard against aggressive substances two protective devices (Figs 3, 4) are provided, which consist of a helmet (plastics, "viniplast") with a safety glass- or metal grid face protection. A tissue protection (made of "moleskin"- VTU 1392-56 Glaviskozh) for ears and neck is attached to the helmet. There are 4 figures and 1 Soviet reference.

ASSOCIATION: Moskovskiy institut okhrany truda VTsSPS
(Moscow Institute for Working Protection VTsSPS)

Card 2/2

AUTHORS: Dokunikhin, N. S., Gayeva, L. A. SOV/79-29-1-62/74

TITLE: Investigation in the Field of Organic Isocyanates (Issledo-vaniye v oblasti organicheskikh izotsianatov). V. On the Transformation Mechanism of Aryl Isocyanates Under Action of Aluminum Chloride (V. O mekhanizme prevrashcheniy arilizotsianatov pri deystvii khloristogo alyuminiya)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 297-301 (USSR)

ABSTRACT: In a previous paper (Ref 1) the authors showed that phenyl isocyanate and its cyclic dimer with molten $AlCl_3$, $NaCl$ yield β -phenyl-2,4-dioxo tetra hydro-quinazoline, whereas naphthyl isocyanate passes over into naphthostyryl (Ref 2). Aryl isothiocyanates form thionic compounds (Ref 3). It is the aim of the present paper to explain the mechanism of these transformations. In the case of formation of β -phenyl-2,4-dioxo tetrahydro-quinazoline (V) two molecules of phenyl isocyanate (I) take part which makes a previous dimerization of the isocyanate necessary. The cyclic dimer (IV) (Ref 4) forms from the monomer only in the case of action of tertiary amines or phosphines. $AlCl_3$ causes at low temperature the transforma-

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SOV/79-29-1-62/74

Investigation in the Field of Organic Isocyanates. V. On the Transformation
Mechanism of Aryl Isocyanates Under Action of Aluminum Chloride

tion of (I) into the cyclic trimer (IV). The dimer of (I) remains unchanged under these conditions and yields together with molten $AlCl_3$ the compound (V), whereas the trimer remains stable against $AlCl_3$ at increased temperature. The formation of (V) from (I) takes place also with $AlCl_3$ in organic solvents at $130 - 160^\circ$. Consequently, temperature is the only factor in connection with the synthesis of different products from phenyl isocyanate. In conclusion, the following results were obtained: phenyl isocyanate (I) forms together with $AlCl_3$ triphenyl isocyanate and at higher temperature 3-phenyl-2,4-dioxo tetrahydro-quinazoline. The dimer of (I), 1,3-diphenyl uretidine-2,4-dione is stable against $AlCl_3$ at low temperature, in the case of increased temperature, however, it passes over into compound (V). Compound (VI) does not react with $AlCl_3 \cdot NaCl$. In the case of an action of $AlCl_3$, the chloric anhydride of

Card 2/3

SOV/79-29-1-62/74

Investigation in the Field of Organic Isocyanates. V. On the Transformation
Mechanism of Aryl Isocyanates Under Action of Aluminum Chloride

phenyl carbamic acid does not lead to compound (V). The transformation of aryl isocyanates by $AlCl_3$ is in connection with a partial polarization of the nitrogen-oxygen-bonds and in the case of increased temperature with the activation of the aromatic nucleus. There are 8 references, 4 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley (Scientific Research Institute for Organic Intermediate Products and Dyes)

SUBMITTED: September 2, 1957

Card 3/3

DOKUNIKHIN, N.S.; GAYEVA, L.A.

Direct mercuration of anthraquinone. Zhur.VKHO 6 no.1:112-113
'61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley im. K.Ye.Voroshilova.
(Anthraquinone) (Mercuration)

DOKUNIKHIN, N.S.; GAYEVA, L.A.

Effect of thallium on orientation during the sulfonation of
anthraquinone. Zhur VKHO 6 no.2:234-235 '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K. Ye. Voroshilova.
(Anthraquinone) (Sulfonation) (Thallium)

DOKUNIKHIN, N.S.; GAYEVA, L.A.

Mercuration of 1-anthraquinonesulfonic acid. Zhur. VKHO 7 no. 2:
236-237 '62. (MIRA 15:4)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley.
(Anthraquinonesulfonic acid) (Mercuration)

DOKUNIKHIN, N.S.; GAYEVA, L.A.

Derivatives of anthraquinone. Part 2: Mercuration and catalytic sulfonation of anthraquinone. Zhur. ob. khim. 33 no.8:2727-2734 Ag '63. (MIRA 16:11)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

DOKUNIKHIN, N.S.; GAYEVA, L.È.

New disulfonic acids of anthraquinone. Zhur. org. khim. 1 no.1s201-
202 Ja '65. (MIRA 18:5)

KAPLAN, A.S.; GAYDA, L.I.; MAKHONIK, G.I.

Analysis of an outbreak of adenovirus diseases in the departments of a children's tuberculosis sanatorium. *Pediatriia* 42 no.9:23-27 (MIRA 17:5) 1963.

1. Iz virusologicheskoy laboratoriil (navezayushchiy A.S. Kaplan) Leningradskoy gorskoy sanitarno-epidemiicheskoy stantsii (glavnyy vrach V.Ye. Kouskile).

KREYMER, S. Ye.; TUZHILINA, N.V.; GAYEVA, L.M.; LOMEKHOV, A.S.

Use of fatty acids of the C₇ - C₉ fraction for the separation
of the iron and copper from cobalt. Zhur.anal.khim. 16 no.3:303-
307 My-Je '61. (MIRA 14:6)

1. Kombinat "Severonikel", Monchegorsk.
(Cobalt-Analysis)
(Iron)
(Copper)
(Acids, Fatty)

KREYMER, S.Ye.; TUZHILINA, N.V.; GAYEVA, L.M.; LOMEKHOV, A.S.

Extraction separation of iron by a mixture of fatty acids of
the C₇ - C₉ fraction. Zav.lab. 28 no.3:266-268 '62.
(MIRA 15:4)

1. Kombinat "Severonikel".
(Iron) (Acids, Fatty)

GAEVA, N. F.

3
4
0
0

Detection and determination of small quantities of copper in precious metals. V. N. Podchalanova, M. S. Usova, and N. P. Gaeva. *Metody Analiza Chernykh i Tsvetnykh Metallov* (Sverdlovsk-Moscow: Metallurgizdat) 1953, 101-4; *Referat. Zhur., Khim.* 1955, No. 9087.—Into a 30-ml. test tube place an acetate, nitrate, or sulfate soln. contg. the ions of Cu, Fe, Al, and precious metals. The concen. of these metals should not exceed 1%. Add 0.05-0.1 g. pyrophosphate, 4-5 drops of AcOH, and 1-2 ml. of pyridine-cyanide reagent (a mixt. of equal vols. of 50% pyridine and 20% cyanide solns.), mix thoroughly, add 3-4 ml. CCl_4 , and mix. The bottom layer colors yellow-green. Into a 2nd similar container place the soln. of the above-mentioned salts except the Cu salt, add $Na_2P_2O_7$, AcOH, and pyridine-cyanide reagent in the same quantities as above, add 3-4 ml. CCl_4 , thoroughly mix for 1 min., and add from a buret a dil. $CuSO_4$ soln. until the color of the CCl_4 layer matches the color in the 1st container. This method was used for analyzing a no. of precious metals and their alloys. The results of these Cu detns. were the same as obtained iodometrically. The detectable min. of Cu in precious metals by these methods was 5×10^{-8} mg./ml. M. Hesch

FM P.M.

Gayeva, N. F.

Category: USSR/Analytical Chemistry - General Questions.

Q-1

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30932

Author : II. Usova M. S., Pushkareva Z.V., Levchenko O. I.
III. Usova M. S., Gayeva N. F.

Inst : Urals Polytechnical Institute

Title : Use of Organic Compounds in the Analysis of Platinum-Group Metals and Gold. Communication II. Precipitation Capacity of Some Noble Metals in the Urea, Thiourea and Guanidine Series. Communication III. Use of Phenothiazine for the Determination of Platinum in Alloys.

Orig Pub: Tr. Ural'skogo politekhn. in-ta, 1956, sb. 57, 192-200; 201-206.

Abstract: II. Report of the results of qualitative tests on the capacity of some substituted urea, thiourea (I) and guanidine (II) compounds, to precipitate platinum metals (PM) from solution. Introduction of phenyl- and heterocyclic residues into the molecules of I and II, clearly enhances the capacity of I and II to precipitate noble metals from solution. The introduction into the

Card : 1/2

-12-

Category: USSR/Analytical Chemistry - General Questions.

G-1

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30932

phenyl rings of diphenyl-thiourea of COOH and SO_2NH_2 groups promotes the secondary process of precipitation of common metals. The capacity of I and II to precipitate Rh increases on transition from derivatives of II to derivatives of I, while on the other hand precipitation of Ir is observed more frequently in the II series. Introduction of a third substituent into the molecule of II decreases considerably the solubility of the compounds formed with PM. The results thus obtained permit to select a number of derivatives of I and II for further study, of their properties as analytical reagents.

III. A study of the capacity of phenothiazine to precipitate specific PM (Pt, Pd, Rh and Ir), for the purposes of qualitative analysis, and also the description of a quantitative method which has been developed for the determination of Pt in solutions of pure Pt salts, in artificially produced mixtures and in silver-platinum alloys, by precipitation with phenothiazine, followed by calcination of the resulting precipitate to metallic Pt. Communication I, see RZhKhim, 1957, 19598.

Card : 2/2

-13-

GAYEVAYA, A. A.

USSR/Chemistry - Laboratories

Nov 50

"Central Plant Laboratories for the Basic Chemical
Industry," A. A. Gayevaya, Giprokhim

"Zavod Lab" No 11, pp 1380-1387

Outlines orgn and functions of cen plant lab and
tech control dept in plants of Min of Chem Ind
and describes 2 plans of cen lab for small and
large chem plants.

180T3

GAYEVAYA, L.

Useful handbook ("Personal protection of workers" by E. Jiru.
Reviewed by L. Gayevaya). Okhr. truda i sots. strakh. 4 no.3:50
(MIRA 14:3)
Mr '61.

1. Starshiy inzhener Moskovskogo instituta ohrany truda Vsesoyuznogo
tsentral'nogo soveta profsoyuzov.
(Czechoslovakia--Industrial safety)
(Jiru, E.)

S/058/63/000/001/067/120
A160/A101

AUTHORS: Ryabov, V. A., Nayman, I. M., Borisova, I. I., Grinevetskaya, S. N.,
Viktorova, Yu. N., Gayevaya, L. A.

TITLE: New light filters for the protection of the eyes during production

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 83, abstract 1D602
("Steklo. Byul. Gos. n.-i. in-ta stekla", no. 1 (110), 1961, 72 -
81)

TEXT: A description is given of the technological process of producing
neutral and selective light filters designed mainly for controlling metallurgical
processes. The light filters are made by applying oxide films from metal salts
of the 4, 5 and 6th period of the periodic system of elements by the aerosol
method. Presented are the characteristics of the light filters with oxide layers
from cobalt, iron, lead + antimony and lead + antimony + iron.

✓
Yu. Kutev

[Abstracter's note: Complete translation]

Card 1/1

GAYEVAYA, L.A., inzh.

New dust respirator. Bezop. truda v prom. 7 no. 7:34 Jl '63.
(MIRA 16:9)
(Respirators)

GAYEVAYA, L.A.

Safety goggles. Mashinostroitel' no.11:40-42 '65.
(MIRA 18:11)

18.1290
18.9000

66982
SOV/81-59-13-45213

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 13, p 71 (USSR)

AUTHORS: Bublik, A.I., Buntar', A.G., Gayevaya, N.P.

TITLE: The Investigation of the Structure of Liquid Alloys of the Bi-Sn System
by the Electronographic Method

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1958, Vol 98, Tr. Fiz. otd. fiz.-matem. fak.,
Vol 7, pp 251 - 256

ABSTRACT: The scattering of electrons by liquid Bi-Sn alloys has been investigated
(for alloys with 20, 50, and 80 atomic % Bi at temperatures close to the
crystallization point, and for the alloy with 50% Bi also at 270°C). The
samples were prepared in the form of "free" films $(2 - 3) \cdot 10^{-6}$ cm thick
by evaporation and condensation in vacuum. The scattering intensity curves
of all alloys, a little overheated above the melting point, agree well with
the calculated ones obtained from the intensity curves for pure components
by the law of additivity. In the case of overheating by several dozens of
degrees above the liquidus there is no such agreement. Based on the inten-
sity curves of scattering the curves of the radial distribution of atoms
in the alloy with 50% Bi have been calculated. The numbers of the adjacent

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66982
SOV/81-59-13-45213

The Investigation of the Structure of Liquid Alloys of the Bi-Sn System by the Electrono-graphic Method

neighbors and the coordination number have been determined approximately. The conclusion is drawn that liquid films of Bi-Sn alloys of any concentration at the melting point consist of regions, in which mainly atoms of one type are found. At overheating by several dozens of degrees this microstratification disappears.

D. Belashchenko

Card 2/2

✓

GAYEVAYA, N.V. [Haieva, N.V.]

Data on the liverworts of the southern Ukraine. Ukr. bot. zhur. 21 no. 5:73-77 '64. (MIRA 18:2)

1. Kafedra botaniki Krivorozhskogo pedagogicheskogo instituta.

STARSHINOV, B.N.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ya.; GAVEVAYA, O.S.;
SINITSKAYA, S.K.; PALAGUTA, V.P.

Results of investigating the final slags used in the smelting
of converter and foundry cast iron in conditions of the
'Zovostal' plant, Sverdlovsk. (NTNM no. 1166-79 '85.
(MIRA 18011)

L 18954-63

EWP(j)/EPF(c)/EWT(m)/BDS ASD PC-4/Pr-4 RM/WW/MAY

ACCESSION NR: AP3006530

S/0191/63/000/009/0009/0010

AUTHORS: Paushkin, Ya. M.; Nizova, S. A.; Gavlevaya, V. S.

69

TITLE: The synthesis of polyvinyl hydrocarbons by means of dehydrohaloid polymerizationSOURCE: Plasticheskiye massy, no. 9, 1963, 9-10

TOPIC TAGS: polymerization, polyvinyl, dehydrohaloid polymerization, dibromoethylbenzol, dichloroethylbenzol, polyphenylacetylene

ABSTRACT: Authors studied the preparation of polyvinyl compounds by means of dehydrohaloid polymerization of Alpha, Beta-dibromoethylbenzol and Alpha, Beta-dichloroethylbenzol in the presence of oxide salts of metal hydroxides. A new method for the preparation of polyvinyl hydrocarbons by means of interlinking reaction of dehydrohaloid polymerization of the dehalogenized monomeric derivatives has been proposed. Polyphenylacetylene was obtained by the proposed method. Apparently, it is possible to obtain polyhydrocarbons from other haloid and dehalogenized derivatives by the same method.

Card

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ACCESSION NR: AT4008698

S/2982/63/000/044/0043/0047

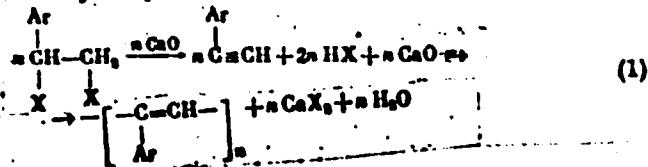
AUTHOR: Paushkin, Ya. M.; Nizova, S. A.; Gayevaya, V. S.

TITLE: Synthesis of high molecular hydrocarbons with conjugated double bonds by dehydrohalogenation polymerization

SOURCE: Moscow. Institut nestekhimicheskoy i gazovoy promyshlennosti. Trudy*, no. 44, 1963. Nestekhimiya, porerabotka nesti i gaza, 43-47

TOPIC TAGS: conjugated polymer, conjugated system containing polymer, polyvinylene hydrocarbons, polyacetylenic hydrocarbons, polymer, poly(phenylacetylene), heat resistant polymer, EPR signal, paramagnetic polymer, vinyl compound polymer, polymerization, dehydrohalogenation, dehydrohalogenation polymerization, vinyls

ABSTRACT: In view of the interesting specific magnetic and electrophysical properties of polymeric hydrocarbons containing conjugated double bonds, the authors studied the formation of polyvinylenes by dehydrohalogenation polymerization at 200°C in the presence of excess CaO:



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